Abstract of the Disclosure

A method and an apparatus for injection-molding plastic material articles, in particular articles consisting of a plurality of components, are disclosed. An injection molding machine has a mold, e.g. a stack mold. The mold is adapted to be temperature-controlled differently in different areas of the mold. A center platen of the stack mold on a first side thereof cooperates with a first mold portion via a first separation plane and, on a second side thereof cooperates with a second mold portion via a second separation plane. The stack mold is provided with a plurality of first, smaller cavities as well as with a plurality of second, larger cavities. Means are provided for injection-molding the first components of the plastic material article in first cavities located in the first separation plane and injection-molding the second components on the first components within the second cavities. A handling system unmolds the first components from the first cavities, transfers same from the first to the second separation plane, places same into the second cavities, and unmolds the plastic material articles from the second cavities. The handling system is provided with e.g. two arms adapted to be inserted into the first and into the second separation plane, respectively, independently one from the other.